

WHAT IS CLAIMED IS:

1. An input/output management system for managing input or output from or to a disk device connected to a computer,
5 comprising:

a connection information definition block in which the relationship of logical connection between said computer and a logical volume included in said disk device or a logical area in a logical volume is defined; and

10 an input/output execution control block that controls, based on the definition, whether said computer can access a logical volume included in said disk device or a logical area in a logical volume.

15 2. An input/output management system for managing input or output from or to a disk device connected to a plurality of computers, comprising:

a connection information definition block in which the relationship of logical connection between each of said
20 computers and a logical volume included in said disk device or a logical area in a logical volume is defined using computer identification information; and

an input/output execution control block that controls, based on the definition, whether each of said computers can
25 access a logical volume included in said disk device or a logical

area in a logical volume.

3. An input/output management system according to Claim 1, wherein said connection information definition block
5 comprises:

a computer identification information definition division in which physical identification information that uniquely indicates said computer connected to said disk device is defined; and

10 a logical volume connection information specification division in which a connected state value concerning the connection of said computer is specified in relation to each logical volume included in said disk device or each logical area in each logical volume.

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4. An input/output management system for managing input or output from or to a disk device connected to a computer according to Claim 1, wherein said connection information definition block comprises:

20 a computer identification information definition division in which the relationship of logical connection between said computer and a logical area in a logical volume included in said disk device is defined using computer identification information; and

25 a logical volume connection information specification

division in which a connected state value concerning the connection of said computer is specified in relation to each logical area in each logical volume included in said disk device.

5 5. An input/output management system according to Claim 4, wherein

 said computer includes a plurality of logical computers,
 computer identification information concerning each of
said logical computers is specified in said computer
10 identification information definition division, and

 said input/output execution control block controls
whether each of said logical computers that share the same
physical input/output path can access a logical area in a logical
volume included in said disk device.

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 6. An input/output management system according to Claim 1, wherein said connection information definition block comprises:

 a computer identification information definition
20 division in which the relationship of logical connection between
said computer and a logical volume included in said disk device
is defined using port numbers assigned to the ports of said
disk device connected to said computer; and

 a logical volume connection information specification
25 division in which a connected state value concerning the

connection of said computer is specified in relation to each logical area in each logical volume included in said disk device.

7. An input/output management system for managing input
5 or output from or to a disk device connected to a computer according to Claim 1,

wherein the definition is used to control whether each of application programs running in said computer can access a logical volume included in said disk device or a logical area
10 in a logical volume.

8. An input/output management system according to Claim 7, further comprising a schedule definition division in which a plurality of pieces of computer identification information
15 that defines whether said computer or each of said application programs can access a logical volume included in said disk device or a logical area in a logical volume is specified in relation to respective time zones, and in which a schedule for automatically changing the plurality of pieces of computer
20 identification information is predefined.

9. An input/output management method for managing input or output from or to a disk device connected to a computer, comprising the steps of:

25 defining the relationship of logical connection between

said computer and a logical volume included in said disk device
or a logical area in a logical volume; and

controlling, based on the definition, whether said
computer can access a logical volume included in said disk device
5 or a logical area in a logical volume.

10. An input/output management method according to Claim
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wherein the definition of the relationship of connection
10 contains physical identification information that uniquely
indicates said computer connected to said disk device, and also
contains logical volume connection information that contains
a connected state value concerning the connection of said
computer to each logical volume included in said disk device
15 or each logical area included in each logical volume.

11. An input/output management method for managing input
or output from or to a disk device connected to a computer,
comprising the steps of:

20 defining, based on computer identification information
and logical volume connection information, the relationship
of logical connection between said computer and a logical volume
included in said disk device or a logical area in a logical
volume; and

25 controlling, based on the definition, whether said

computer can access a logical area in a logical volume included in said disk device.

12. An input/output management method according to Claim 5 9, wherein whether each of application programs running in said computer can access a logical volume included in said disk device or a logical area in a logical volume is controlled.

13. An input/output management method according to Claim 10 11, wherein a plurality of pieces of definition information that defines whether said computer or each of application programs running in said computer can access a logical volume included in said disk device or a logical area in a logical volume is automatically switched with the start of each of time 15 zones according to a predefined schedule.

14. An input/output management method according to Claim 10,

wherein definition information that defines whether said 20 computer or each of application programs running in said computer can access a logical volume included in said disk device or a logical area in a logical volume is automatically modified with a system failure occurring in said connected computer as a trigger.

15. A disk control program for implementing a method of processing information based on which input or output from or to a disk device connected to a computer is managed, wherein said method comprises the steps of:

5 defining the relationship of logical connection between said computer and a logical volume included in said disk device or a logical area in a logical volume on the basis of both physical identification information that uniquely indicates said computer connected to said disk device, and logical volume
10 connection information that contains a connected state value concerning the connection of said computer to each logical volume included in said disk device or each logical area in each logical volume; and

 controlling, based on the definition, whether said
15 computer can access a logical volume included in said disk device or a logical area in a logical volume.